

CONTENTS

Symposium C&C—Contracts & Claims

- C&C.1 *Estimating Delay Damages*—Gary H. Jentzen, PE, Robin A. Collins, PE, and Dr. Gui Ponce de Leon, PE
C&C.3 *Claims Prevention: Offense Versus Defense*—James G. Zack Jr.
C&C.4 *Pricing the Risk of Liability Associated With Environmental Clean-Up Projects*—Dr. Joon H. Paek
C&C.5 *Forward Pricing Impact on Construction Projects*—Brian E. Kasen and Victor C. Oblas, PE
C&C.6 *Worker's Compensation Fraud in Construction*—Dr. Richard J. Coble and Bradford L. Sims
C&C.7 *Consequential Cost Effects*—Paul R. Heather, CCE and Michael D. Summers, CCE
C&C.8 *It's the Curve, Silly . . .*—James A. Young III, CCC
C&C.10 *Real Estate Development Environmental Regulations Overview*—Bruce D. Harrigan, PE CCE
C&C.11 *Internal Contracts, Cost Engineering, and Organizational Problems*—Dr. Michel Nakhla and Dr. Louis Georges Soler
C&C.12 *Cost Engineering Considerations in Privatization*—Marc A. Zocher, CCC, Dr. Orman H. Paananen, and Carol Sohn

Symposium C&S/M&C—Cost & Schedule/Management & Control

- C&S/M&C.1 *Going for the Goal, Forecasting*—Joseph M. Brown, CCC
C&S/M&C.2 *Recycled Rubber in Asphalt Concrete Mixtures*—Katrina D. Washington
C&S/M&C.3 *Developing an As-Built Schedule From Project Records*—John R. Knoke, PE and Gary H. Jentzen, PE
C&S/M&C.4 *How to Achieve Improved Project Results*—Donald W. Nealon
C&S/M&C.5 *ABC Application for an Engineering Company*—Andrés Villegas, PE, Ana María Balderrama, PE, Stelvio Di Cecco, PE, and Pedro Cáceres, CCC
C&S/M&C.6 *Techniques and Tools for Project Cash Flow Prediction in the Australian Construction Industry*—Timothy R. O'Leary and Dr. Selwyn Tucker
C&S/M&C.7 *The End Game—Project Demobilization and Close-Out*—Edward E. (Ted) Douglas III, CCC
C&S/M&C.8 *Cost Managing by Project Deliverables*—Walter J. Strutt, PE CCE
C&S/M&C.10 *Accurate Estimates Start With Clear Pictures*—Randal S. Zentner
C&S/M&C.11 *TVA's Project-Baselining and Improvement Process*—Thomas E. Simpson, CCE and C. Robert Seay Jr.
C&S/M&C.12 *Project Controls Within a Partnering Agreement*—James E. Krebs, PE and Alan J. Epstein, CCC
C&S/M&C.13 *A Communication-Based Critique of Traditional Cost Models*—Dr. Paul A. Bowen, P.J. Edwards, and Cliff Hardcastle
C&S/M&C.14 *A Scheduling Tool for Tunnel Construction*—K.A. Pohrte and W.W. Edgerton, PE
C&S/M&C.15 *Total Cost Management for Mega Projects Constructed by the Korean Public Corporation*—Yong-Eok Lee
C&S/M&C.17 *Project Controls in the Semiconductor Industry*—Robert B. Edgerton and Steven Y. Kunishige
C&S/M&C.18 *M/EPCC Replaces EPCM*—Charles Poulton, PE CCE
C&S/M&C.20 *Cost Forecasting—Beyond the Crystal Ball*—Leslie E. McMullan
C&S/M&C.21 *A Cost-Schedule Decision-Support System for Airport Renovation*—Manar Shami

Symposium D&RM—Decision & Risk Management

- D&RM.1 *A Contract Clause for Allocating Risks*—Dr. George F. Jergeas, P.Eng. and Dr. Francis T. Hartman, P.Eng.

- D&RM.2 *Effective Risk Management for Remediation Projects*—Timothy C. McManus, Robert Goltz, PE, and Lisa R. Turnbaugh
- D&RM.3 *Project Capital Cost Risks and Contracting Strategies*—Dr. K. Pedwell, P.Eng., Dr. Francis T. Hartman, P.Eng., and Dr. George F. Jergeas, P.Eng.
- D&RM.4 *Risk Management Through Sensitivity Analysis*—Dr. Ted G. Eschenbach, PE

Symposium EST—Cost Estimating

- EST.1 *Utility Cost Estimating*—William R. Fletcher
- EST.3 *Twelve New, Exciting Estimating Tools*—Joseph A. Brown, CCE
- EST.4 *Assessing Environmental Parameters for Commercial Buildings*—Dr. James Sommerville, Dr. G. Galbraith, and S. Craig
- EST.5 *Evaluating Environmental Restoration Cost Estimating Systems*—W. David Featherman and Dr. R.F. Shangraw Jr.
- EST.7 *Methodology and Techniques of Estimating Heavy Industrial Process-Related Projects*—Kiran Jani, PE
- EST.8 *The Evolution of Estimating Systems at Kodak*—John K. Hollmann, PE CCE and Larry R. Dysert, CCC
- EST.9 *Pharmaceutical Cost Estimation*—Gideon Samid, PE
- EST.10 *Estimating Engineered Equipment Costs*—Kul B. Uppal, PE
- EST.11 *Factored Estimating Guidelines—Refinery/Petrochemical Projects*—Robert S. Smith, PE
- EST.12 *Paper Machine Rebuild Estimating*—Peter L. Haines, CCE
- EST.13 *Simplified Project Economic Evaluation*—Mark T. Chen, PE CCE
- EST.14 *Cost Estimating Using Historical Costs*—Kymberli Popham, CCE
- EST.15 *Highway Estimating Using a Standard Form*—Ernest Wolski
- EST.16 *Cost Assessment of Intermodal Transportation Linkages*—Dr. Darlene P. Butler, Dr. Eric M. Malstrom, Raja G. Kasilingam, and Jerry L. Moore
- EST.17 *Thirty-Five Years of Hydroelectric Estimating*—George H.S. Duddy, P.Eng.

Symposium INT—International Project & Cost Management

- INT.1 *Managing Risk on Global Projects*—Charles P. Woodward, PE CCE and Kartar Singh, PE
- INT.3 *Plan Local, Buy Global*—Dennis M. Thompson, CCE
- INT.4 *Project Ownership in the Third World*—Ram Dabadghav, PE CCE

Symposium IT—Information Technology

- IT.2 *Implementing a Database Estimating System*—Robert H. Harbuck, PE CCE
- IT.4 *Impact of Information Technology on Construction Project Management*—Abhi Basu, PE
- IT.6 *Integrated Project Control and Communications Systems*—Gerard J. Hart

Symposium MAT—Materials Management

- MAT.2 *Critical Spares Inventory Management*—Patrick J. Cardamone

Symposium P&S—Planning & Scheduling

- P&S.1 *Subcontracting Out Scope: According to Plan*—Quentin W. Fleming and Joel M. Koppelman
- P&S.2 *Matrix Scheduling for Repetitive Residential Construction*—Neil D. Opfer, CCE
- P&S.3 *Construction in an Operating Environment*—David W. Derkach, CCC
- P&S.4 *A Decision Support System for Project Planning*—Prasanta K. Dey, Mario T. Tabucanon, and Dr. Stephen O. Ogunlana

Symposium PM—Project Management

- PM.1 *Distance Learning for Project Management*—Dr. Itzhak Wirth and Dr. Scott J. Amos
- PM.2 *Reengineering Kodak's Capital Process*—Robert J. Nemes and Joseph A. Lukas, PE CCE
- PM.3 *Business Process Reengineering: What It Is, What It Is Not!*—Dr. Deborah S. Kezsbom
- PM.4 *Managerial Stress—The Construction Industry's Hidden Enemy*—Anamaria I. Kohler
- PM.5 *A Project Management Outline for Base Closures and Reuse—A New Frontier*—Timothy C. McManus and William Burke
- PM.6 *Effective Project Management in Bureaucracies*—John R. Spittler, PE and Courtney J. McCracken, PE
- PM.7 *Simplifying Project Success Metrics*—Dr. Francis T. Hartman, P.Eng. and Dr. George F. Jergeas, P.Eng.

Symposium PROD—Productivity

- PROD.1 *Labor Productivity Modeling With Neural Networks*—Dr. James E. Rowings Jr., PE CCE and Rifat Sonmez
- PROD.3 *Productivity of Construction in Developing Areas: India*—Dr. Enno Koehn, PE and V. R. Ganapathiraju
- PROD.4 *Construction Productivity: Continuous Improvement Is Normal*—Dr. Richard E. Larew, PE CCE
- PROD.5 *TVA's Continuous Outage Productivity Measurement/Improvement*—Dr. Hans E. Picard and C. Robert Seay Jr.

Symposium PROF—Profitability

- PROF.2 *Using Cost Engineering Techniques to Upgrade Your Personal Finances (and Increase Your Investment Portfolio)*—F. Sam Griggs Jr., CCE
- PROF.4 *Environmental Investment Blueprint in Southern Africa*—Thomas Richard Muller
- PROF.5 *ROI for Management*—R. Eugene Reed Jr., PE CCE

Symposium QM/A—Quality Management/Analysis

- QM/A.2 *Concurrent Management of Total Cost and Total Quality*—Bryan R. McConachy, P.Eng.

Symposium TCM—Total Cost Management

- TCM.4 *Focus: Total Cost Management*—Jean-Paul Prentice, CCE

Symposium VE&C—Value Engineering & Constructability

- VE&C.2 *Constructability in the Design Firm*—James A. Young III, CCC
- VE&C.3 *Hibernia Gravity Base Structure: Management Techniques*—Dr. Roger Woodhead, P.Eng.
- VE&C.4 *Expert Rules-of-Thumb for Effective Design Coordination*—Dr. Tarek M. Hegazy and Dr. Jameel Khalifa, PE
- VE&C.5 *Best Value Contracting: Breaking the Low-Bid Paradigm*—Dr. Douglas D. Gransberg, PE and Michael A. Ellicott, PE
- VE&C.6 *Constructability, "The Stretch Version"*—Robert J. Geile, PE
- VE&C.7 *Cost Engineering and Continuous Performance Improvement*—Peter W. Ripley, CCC
- VE&C.8 *VE Applied to Transit System Development*—Dr. Scott J. Amos, PE
- VE&C.9 *Selection of Appropriate Trenchless Technologies for the Repair and Rehabilitation of Underground Infrastructure Systems*—Dr. Robert A. McKim, P.Eng.